

CLAIMS

1. A centrifugation injection mold, characterized in that it comprises a lower mold portion (10) having a basic block (11) that is inferiorly and rotatively mounted to bearing means (30) that are affixed to a machine structure (E), a plurality of axial columns (13), which are peripherally and superiorly affixed to the basic block (11), and a moveable block (12) defining a lower mold cavity (12a) and being slidingly mounted to the axial columns (13), in order to be axially displaced between an open mold position and a closed mold position, elastic means (50) seated on the basic block (11) and constantly forcing the moveable block (12) to the closed mold position; a locking means (15) mounted to each axial column (13); and an upper mold portion (20) to be removably seated on the axial columns (13) and affixed thereto by the locking means (15) in a closed mold position.
2. The mold according to claim 1, characterized in that each axial column carries a guide means (14) for receiving, by axial displacement, a corresponding external surface portion of the upper mold portion (20).
3. The mold according to claim 2, characterized in that each guide means (14) is defined by a radially internal end chamfer of the respective axial column (13).
4. The mold according to claim 2, characterized in that each axial column (13) carries a stop means (15) for limiting said axial displacement of the upper mold portion (20) and defining the closed mold position thereof.
5. The mold according to claim 4, characterized in that each stop means (15) is defined by a respective locking means (15).

6. The mold according to claim 2, characterized in that the upper mold portion (20) is provided with a lock receiving means (25) to be engaged by the locking means (15) of a respective axial column (13) when the 5 upper mold portion (20) is axially slid in the guide means (14) until reaching the closed mold position and slightly rotated around its axis.
7. The mold according to claim 6, characterized in that each locking means (15) comprises a pin radially 10 projecting from the respective axial column (13), each lock receiving means (25) being defined by a groove provided in the external surface of the upper mold portion (20) and presenting an axial extension that receives the locking means (15) upon the axial sliding 15 of the upper mold portion (20) in the guide means (14), and a short circumferential extension that receives the locking means (15) upon the slight rotation of the upper mold portion (20).
8. The mold according to claim 1, characterized in 20 that it further comprises an impelling means (60) operatively associated with the machine structure (E) and with the moveable block (12) and which is selectively driven to displace the moveable block (12) to the open mold position against the action of the 25 elastic means (50).
9. The mold according to claim 8, characterized in that the impelling means (60) comprises an elongated rod (61) axially and slidingly trespassing the basic block (11) and the moveable block (12) of the lower 30 mold portion (10), said elongated rod (61) having an upper end provided with an annular flange (62) to be seated against the central region of the lower mold cavity (12a) and a lower end coupled to a driving device to selectively and axially displace the 35 elongated rod (61).

10. The mold according to claim 9, characterized in that the upper end of the elongated rod (61) further incorporates an axial extension (63) onto which is tightly fitted a lamination stack (PL) of the rotor of
5 an electric motor.

11. The mold according to claim 1, characterized in that each axial column (13) carries a spacer (70) that is simultaneously seated against the two mold portions (10a, 20a) when the latter reach a certain minimum
10 spacing larger than that corresponding to the respective closed mold positions.